

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows:

- 1-14. (Canceled)
15. (Currently Amended) A light-emitting device using a gallium nitride compound semiconductor comprising:
- an emission layer with a multi quantum-well (MQW) structure, in which a barrier layer and a well layer are formed alternatively;
 - an n-layer comprising $\text{Al}_x\text{Ga}_{1-x}\text{N}$, wherein $0 \leq x \leq 0.06$, having a thickness from 50 nm to 300 nm;
 - a substrate; and
 - a buffer layer formed on said substrate,
- wherein said barrier layer is made of $\text{Al}_x\text{Ga}_{1-x}\text{N}$.
16. (Currently Amended) A light-emitting device using a gallium nitride compound semiconductor according to claim 15, wherein said buffer layer is formed at a temperature of 1000°C to 1180°C.
17. (Currently Amended) A light-emitting device using a gallium nitride compound semiconductor according to claim 15, wherein said buffer layer has a thickness of 0.01 μm to 3.2 μm
18. (Currently Amended) A light-emitting device using a gallium nitride compound semiconductor according to claim 15, wherein said buffer layer is formed by physical vapor ~~deposit~~ deposition including any of sputtering, ion plating, and laser-ablation.
19. (Currently Amended) A light-emitting device using a gallium nitride compound semiconductor according to claim 18, wherein said buffer layer has a thickness of 100 Å to 3000 Å.
20. (Currently Amended) A light-emitting device using a gallium nitride compound

semiconductor according to claim 18, wherein said buffer layer is formed at a temperature of 200 °C to 600 °C.

21. (Currently Amended) A light-emitting device using a gallium nitride compound semiconductor according to claim 18, wherein said buffer layer is treated by heat treatment at a temperature of 1000 °C to 1250 °C.

22. (Currently Amended) A light-emitting device using a gallium nitride compound semiconductor according to claim 21, wherein said heat treatment is carried out in an atmosphere of H₂ and NH₃ gases.

23. (New) A light-emitting device using a gallium nitride compound semiconductor according to claim 15, wherein said n-layer has a thickness from 150 nm to 250 nm.

24. (New) A light-emitting device using a gallium nitride compound semiconductor according to claim 15, wherein said well layer comprises In_yGa_{1-y}N, wherein 0<y≤0.1.